

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



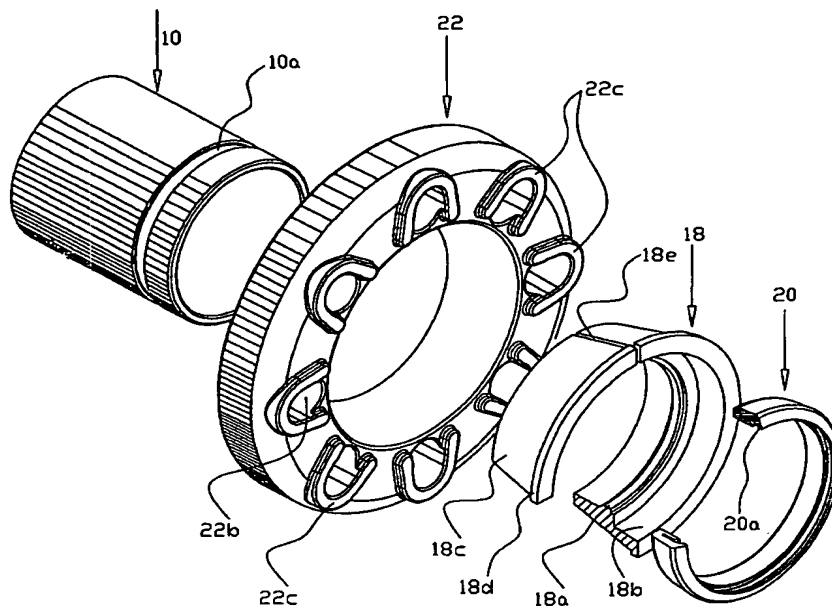
(43) International Publication Date  
11 December 2003 (11.12.2003)

PCT

(10) International Publication Number  
**WO 03/102458 A1**

- (51) International Patent Classification<sup>7</sup>: **F16L 23/028**
- (21) International Application Number: **PCT/IL02/00427**
- (22) International Filing Date: **30 May 2002 (30.05.2002)**
- (25) Filing Language: **English**
- (26) Publication Language: **English**
- (71) Applicant (for all designated States except US): **ARKAL FILTRATION SYSTEMS C.S. LTD.** [IL/IL]; Jordan Valley, 15135 Kibbutz Beit-Zera (IL).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): **BEN-HORIN, Raanan** [IL/IL]; Jordan Valley, 15135 Kibbutz Beit-Zera (IL).
- (74) Agent: **FREIMANN, Daniel**; P.O. Box 29814, 61297 Tel Aviv (IL).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:  
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PIPE COUPLING



(57) **Abstract:** A pipe coupling for connecting a pipe to a flange associated with another pipe in a sealed manner. The pipe (10) is formed with circumferential groove (10a). The coupling comprises a gasket (20), a mounting ring (18), and a mounting flange (22). The ring (18) is elastically expandable, e.g. by being split, and formed with projecting rib (18a) adapted to fit into the groove (10a) and hold the ring affixed to the pipe (10). The mounting flange (22) is tightened against both the ring (18) and a counter-flange (12), through matching cone-shaped surfaces (18c, 22a).

WO 03/102458 A1